Estimating the School Impacts of Housing Development

Presented to the Chapter 40B Task Force

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Issues to Consider

- Estimating the number of new students

- Estimating the costs of new students

How many new students?

- **<u>What is the type of housing being proposed?</u>**

  - ◆ Rental versus homeownership?
  - ◆ Single family versus multifamily?
  - ◆ 1BR? 2BR? 3 BR? 4 BR?

How many new students?

Number of Bedrooms	UMASS/DHCD Single Family	Avalon Bay Rental - Actual
1	.20	.01
2	.20-.25	.28
3	.51-.78	.85
4	.82-.87	n/a
5	.64-.93	n/a

How many new students?

- <u>Conclusions:</u>

  - ◆ Ownership housing has different impact than rental housing.

  - ◆ The number of bedrooms in the proposed homes impacts the number of school age children.

How many new students?

- <u>Will the development have a local preference?</u>

  - ◆ If families with children relocate to a new home within the community, there will be no net increase in schoolchildren with respect to those households.

How many new students?

- <u>Consider:</u>

  - ◆ Avalon Bay Example: 353 school age children live in 1382 apartment homes built by Avalon Bay in Massachusetts.

  - ◆ 93 of these children, or 26.35%, moved to their new homes from within the municipality.

How many new students?

- <u>Consider:</u>

  - ◆ What percentage of students within the community attend public (versus private) schools?

    - ◆ 2002 statewide average:
      - • 89.8% public schools
      - • 10.2% private schools

How many new students?

- <u>Tools for estimating new students:</u>

  - Growth Impact Handbook (DHCD)
  - Fiscal Impact Tool (EOEA)
  - Census Data (PUMS)
  - Consider: UMASS Report
  - Consider: Similar Developments

What is the cost of new students?

- <u>2 basic methods of estimating municipal cost:</u>

  - Average Cost
  - Marginal Cost

What is the cost of new students?

- <u>Average Cost</u>

  - Simple per-student cost
  - (number of students X average cost per student)

What is the cost of new students?

- <u>Marginal Cost</u>

  - Analyzes current capacity and infrastructure to ascertain whether certain types of new development will rely on existing capacities or will push services over existing capacity, requiring new capital investment.

What is the cost of new students?

- Average Cost
  - Does not consider excess or deficient capacity
  - Data gathering and analysis is comparatively simple

- Marginal Cost
  - Considers potential deficiencies
  - Detailed analysis of local services
  - Data gathering and analysis is more complex

What is the cost of new students?

- In the shorter term, marginal cost analysis produces more reliable results.

- Over the longer term, average cost and marginal cost analysis produce similar results.

What is the cost of new students?

- <u>Tools for estimating the cost of new students:</u>

  - Growth Impact Handbook (DHCD)
  - Fiscal Impact Tool (EOEA)
  - Census Data (PUMS)
  - Consider: UMASS Report
  - Consider: Similar Developments

What is the cost of new students?

- <u>Consider:</u>

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What is the cost of new students?

■ <u>Consider:</u>

◆ At what level does the state reimburse the community for educational costs?

♦ The community does not bear the full cost of educating new students

What is the cost of new students?

■ <u>Also consider:</u>

◆ Economic, civic, and social benefits which attend housing growth